

In the following questions, a statement of Assertion (A) followed by a statement of Reason (R) is given.

Choose the correct option out of the choices given below each question:

- (a) Assertion and Reason both are correct and Reason is the correct explanation of Assertion.
- (b) Assertion and Reason both are wrong.
- (c) Assertion is correct but Reason is wrong.
- (d) Assertion is wrong but Reason is correct.
- (e) Assertion and Reason both are correct statements but Reason is not the correct explanation of Assertion.

Question 94. Assertion (A): Nitration of chlorobenzene leads to the formation of m-nitrochlorobenzene.

Reason (R):  $\text{NO}_2$  group is a w-directing group.

**Solution:** (d) Nitration of chlorobenzene gives ortho and para nitro chlorobenzene. However, nitro group is meta directing in nature.